

WHAT IS CLAIMED IS:

1. An injection molding nozzle having a nozzle tip, said nozzle tip comprising:

a body portion;

a tip portion extending from an end of said body portion, wherein said tip portion includes at least one planar surface area; and

a centrally located melt bore extending through at least a portion of said body and tip portions.

2. The injection molding nozzle of claim 1, wherein said body portion includes at least one planar surface area.

3. The injection molding nozzle of claim 1, wherein said body portion includes a plurality of planar surface areas.

4. The injection molding nozzle of claim 1, wherein said tip portion further includes a plurality of planar surface areas.

5. The injection molding nozzle of claim 1, further comprising a diverted melt bore extending from an end of said centrally located melt bore.

6. The injection molding nozzle of claim 5, wherein at least a portion of said at least one planar surface area is located above said diverted melt bore.

7. An injection molding nozzle having a nozzle tip, said nozzle tip comprising:

a body portion;

a tip portion extending from an end of said body portion, wherein said tip portion includes at least one concave outer surface area; and

a centrally located melt bore extending through at least a portion of said body and tip portions.

8. The injection molding nozzle of claim 7, wherein said body portion includes at least one concave outer surface area.

9. The injection molding nozzle of claim 7, wherein said body portion includes a plurality of concave outer surface areas.

10. The injection molding nozzle of claim 7, wherein said tip portion further includes a plurality of concave outer surface areas.

11. The injection molding nozzle of claim 7, further comprising a diverted melt bore extending from an end of said centrally located melt bore.

12. The injection molding nozzle of claim 11, wherein at least a portion of said at least one concave outer surface area is located above said diverted melt bore.

13. An injection molding nozzle having a nozzle tip, said nozzle tip comprising:

a body portion;  
a tip portion extending from an end of said body portion,  
wherein said tip portion includes at least one convex outer surface area; and  
a centrally located melt bore extending through at least a portion of said body and tip portions.

14. The injection molding nozzle of claim 13, wherein said body portion includes at least one convex outer surface area.

15. The injection molding nozzle of claim 13, wherein said body portion includes a plurality of convex outer surface areas.

16. The injection molding nozzle of claim 13, wherein said tip portion further includes a plurality of convex outer surface areas.

17. The injection molding nozzle of claim 13, further comprising a diverted melt bore extending from an end of said centrally located melt bore.

18. The injection molding nozzle of claim 17, wherein at least a portion of said at least one convex outer surface area is located above said diverted melt bore.

19. An injection molding nozzle having a nozzle tip, said nozzle tip comprising:

a body portion;  
a tip portion extending from an end of said body portion,  
wherein said tip portion includes at least one planar outer surface area; and  
a centrally located melt bore extending through at least a portion of said body portion of the nozzle tip.

20. An injection molding nozzle having a nozzle tip, said nozzle tip comprising:

a body portion;  
a tip portion extending from an end of said body portion,  
wherein said tip portion has a polygonal cross section; and  
a centrally located melt bore extending through at least a portion of said body and tip portions.